

IN THE CLAIMS:

Please amend the claims as follows. The claims are in the format as required by 35 C.F.R. § 1.121.

1. (Canceled)
2. (Currently Amended) A method implemented in a switch having a plurality of ports, the method comprising:
  - executing a plurality of instructions for polling a set of operational ports to determine whether each of the operational ports has frames to be routed, wherein the operational ports are polled in a repeating sequential fashion;
  - examining the plurality of ports to identify one of the operational ports which becomes non-operational;
  - modifying a set of instructions corresponding to the identified non-operational port so that the identified non-operational port is not polled by replacing a first instruction in the set of instructions corresponding to the identified non-operational port with a branch instruction, wherein replacing the first instruction comprises writing a data value comprising a binary representation of the branch instruction to the memory address in which the first instruction is stored; and
  - continuing to execute the plurality of instructions.
3. (Original) The method of claim 2, further comprising monitoring the plurality of ports to detect changes in operational states of the plurality of ports.
4. (Canceled).
5. (Currently Amended) The method of claim 2-4 wherein the branch instruction causes execution of the plurality of instructions to jump to a set of instructions corresponding to a subsequent port.
6. (Canceled).
7. (Currently Amended) The method of claim 2-6 wherein the data value is formed by performing a binary OR operation on a branch op code and an offset between the first

instruction in the set of instructions corresponding to the identified non-operational port and the first instruction in the set of instructions corresponding to the subsequent port.

8. (Currently Amended) ~~The method of claim 2, further comprising~~ A method implemented in a switch having a plurality of ports, the method comprising:

executing a plurality of instructions for polling a set of operational ports to determine whether each of the operational ports has frames to be routed, wherein the operational ports are polled in a repeating sequential fashion;

examining the plurality of ports to identify one of the operational ports which becomes non-operational;

modifying a set of instructions corresponding to the identified non-operational port so that the identified non-operational port is not polled;

examining the plurality of ports to identify a non-operational port which becomes operational;

modifying a set of instructions corresponding to the identified operational port so that the identified operational port is polled, wherein prior to modification, the set of instructions corresponding to the identified operational port comprise a branch instruction followed by one or more additional instructions, and further wherein modifying the set of instructions corresponding to the identified operational port comprises replacing the branch instruction with a replacement instruction, wherein replacing the branch instruction comprises writing a data value comprising a binary representation of the replacement instruction to the memory address in which the branch instruction is stored; and

continuing to execute the plurality of instructions.

9. (Currently Amended) ~~The method of claim 8, wherein prior to modification, the set of instructions corresponding to the identified operational port comprise a branch instruction followed by one or more additional instructions, wherein the branch instruction is configured to cause execution of the plurality of instructions to jump to a set of instructions corresponding to a subsequent port.~~

10. (Currently Amended) ~~The method of claim 9 wherein modifying the set of instructions corresponding to the identified operational port comprises replacing the branch instruction with a replacement instruction, wherein the replacement instruction and the one or more additional~~

instructions are configured to poll the identified operational port to determine whether the identified operational port has frames to be routed.

11. (Original) The method of claim 9 wherein modifying the set of instructions corresponding to the identified operational port comprises replacing the branch instruction and the one or more additional instructions with a set of replacement instructions configured to poll the identified operational port to determine whether the identified operational port has frames to be routed.

12. (Canceled)

13. (Original) The method of claim 2, further comprising invalidating at least a portion of an instruction cache after modifying the set of instructions corresponding to the identified non-operational port so that the identified non-operational port is not polled.

14. (Currently Amended) A method implemented in a switch having a plurality of ports, the method comprising:

executing a plurality of instructions for polling a set of operational ports to determine whether each of the operational ports has frames to be routed, wherein the operational ports are polled in a repeating sequential fashion;

examining the plurality of ports to identify a non-operational port which becomes operational;

modifying a set of instructions corresponding to the identified operational port so that the identified operational port is polled by replacing a first instruction in the set of instructions corresponding to the identified non-operational port with a branch instruction, wherein replacing the first instruction comprises writing a data value comprising a binary representation of the branch instruction to the memory address in which the first instruction is stored; and

continuing to execute the plurality of instructions.

15. (Currently Amended) A method for decreasing routing latency of a switching platform, comprising the steps of:

monitoring a set of ports in the switching platform;

identifying ones of the set of ports that undergo a change of operational state; and

modifying port control instructions associated with the identified ones of the set of ports  
to reflect current operational states of the identified ones of the set of ports;

wherein for each of the set of ports,

if the port is operational, the modified port control instructions associated with the  
port are configured to poll the port for frames to be routed, and

if the port is non-operational, the modified port control instructions associated  
with the port are configured to branch to a subsequent port according to a  
branch instruction, wherein the modified port control instructions include a  
data value comprising a binary representation of the branch instruction.

16. (Original) The method of claim 15 wherein ports having a level of functionality below a predetermined threshold level are considered non-operational and ports having a level of functionality at or above the predetermined threshold level are considered operational.

17-24. (Canceled)